

WHAT IS CLAIMED IS:

1. A flat-panel display device comprising:

a transparent first plate and a second plate which are disposed in parallel with each other and cooperate to define therebetween an air-tight space in which light is generated for emission through said first plate;

a sealing material for air-tightly sealing said air-tight space along a periphery of said first and second plates; and

metallic thin sheets bonded with said sealing material to end faces of said first and second plates such that said metallic thin sheets cover said end faces.

2. The flat-panel display device according to claim 1, further comprising:

a plurality of internal conductors disposed between said first and second plates, each of said plurality of internal conductors having one end located near said end faces; and

a plurality of lead conductors provided on surfaces of said metallic thin sheets which face said end faces of said first and second plates, said plurality of lead conductors being electrically connected to said internal conductors, respectively.

3. The flat-panel display device according to claim 2, wherein each of said plurality of lead conductors has one end portion which extends in a direction substantially parallel to inner surfaces of said first and second plates, toward inner

portions of said first and second plates, said each lead conductor being electrically connected at said one end portion thereof to the corresponding one of said plurality of internal conductors.

4. The flat-panel display device according to claim 2, wherein each of said metallic thin sheets has a surface covered by a layer of a dielectric material, and said plurality of lead conductors are strips of an electrically conductive material formed on said layer of the dielectric material.

5. The flat-panel display device according to claim 2, further comprising a plurality of external conductors which are provided on a back surface of said second plate and which are electrically connected to said plurality of lead conductors, respectively.

6. The flat-panel display device according to claim 2, wherein each of said metallic thin sheets is an L-shaped sheet that is L-shaped in transverse cross section and consists of two portions one of which faces said end faces of said first and second plates and the other of which faces a back surface of said second plate, each of said plurality of lead conductors being provided on one surface of said L-shaped sheet and L-shaped following said one surface of said L-shaped sheet.

7. The flat-panel display device according to claim 1, wherein each of said metallic thin sheets includes an

end-face portion covering said end faces of said first and second plates, and a back-surface portion which extends from said end-face portion and covers a back surface of said second plate, said back-surface portion being provided for pressing contact with a heat dissipating member fixed to a frame member when the flat-panel display device is attached to the frame member.

8. The flat-panel display device according to claim 1, further comprising an electromagnetic-wave absorbing film which is formed on a front surface of said first plate and which is connected at a peripheral portion thereof to said metallic thin sheets.

9. The flat-panel display device according to claim 1, which is used as each of unitary components of a large-sized tiled display device wherein a plurality of flat-panel display devices are arranged to provide a single flat display surface.

10. A process of manufacturing a flat-panel display device comprising a transparent first plate and a second plate which are disposed in parallel with each other and cooperate to define therebetween an air-tight space which is air-tightly sealed along a periphery of the first and second plates and in which light is generated for emission through the first plate, said process comprising the steps of:

applying a sealing material to end faces of said first and

second plates such that a peripheral portion of said air-tight space is filled with a mass of said sealing material;

forcing metallic thin sheets onto said end faces of said first and second plates such that said metallic thin sheets cover said end faces; and

heating said metallic thin sheets and said sealing material to fire said sealing material for air-tightly bonding together said first and second plates, and bonding said metallic thin sheets to said end faces through said sealing material, to thereby air-tightly seal said air-tight space along its periphery.

11. The process according to claim 10, wherein each of said metallic thin sheets is provided with a plurality of perforations through which an excess portion of a mass of said sealing material initially existing between said each metallic thin sheet and said end faces of said first and second plates is moved outwardly of said each metallic thin sheet.

12. The process according to claim 11, further comprising a step of removing said excess portion of said mass of the sealing material which has been moved through said perforations outwardly of said each metallic thin sheet, after said step of heating said metallic thin sheets and said sealing material to fire said sealing material.

13. The process according to claim 10, wherein said step of applying said sealing material to said end

faces of said first and second plates and said step of forcing said metallic thin sheets onto said end faces are performed substantially concurrently by forcing said metallic thin sheets each coated on one surface thereof with said sealing material onto said end faces of said first and second plates.

14. The process according to claim 10, further comprising a step of forming a layer of a dielectric material on one surface of each of said metallic thin sheets, and a plurality of strips of an electrically conductive material on said layer of the dielectric material, before said step of applying said sealing material, said strips being fired into a plurality of lead conductors in said step of heating said metallic thin sheets and said sealing material.